

PTO/SB/08A (08-03)

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/632,482
		Filing Date	August 1, 2003
		First Named Inventor	PHAN, LOC X.
		Art Unit	3732d
		Examiner Name	Unassigned
Sheet 1 of 10	Attorney Docket Number		018563-001130US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ³ (if known)			
C/O	AA	2,467,432	04-19-1949	Kesling	
	AB	3,660,900	05-09-1972	Andrews	
	AC	3,860,803	01-14-1975	Levine	
	AD	3,916,526	11-04-1975	Schudy	
	AE	3,950,851	04-20-1976	Bergersen	
	AF	4,014,096	03-29-1977	Dellinger	
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	AH	4,324,546	04-13-1982	Heitlinger et al.	
	AI	4,348,178	09-07-1982	Kürz	
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	AK	4,504,225	03-12-1985	Yoshii	
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	AM	4,575,805	03-11-1986	Moermann, et al.	
	AN	4,611,288	09-09-1986	Duret et al.	
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	AU	4,798,534	01-17-1989	Breads	
	AV	4,837,732	06-06-1989	Brandestini et al.	
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	AX	4,856,991	08-15-1989	Breads et al.	
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BA	4,964,770	10-23-1990	Steinbichler et al.		
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BF	5,035,613	07-30-1991	Breads et al.		
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BN	5,139,419	08-18-1992	Andreiko et al.		
C/O	BO	5,184,306	02-02-1993	Erdman et al.	
Examiner Signature	Cathy O'Connor		Date Considered	3-9-05	

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000	BP	5,186,623	02-16-1993	Breads et al.	
	BQ	5,257,203	10-26-1993	Riley et al.	
	BR	5,273,429	12-28-1993	Rekow et al.	
	BS	5,278,756	01-11-1994	Lemchen et al.	
	BT	5,338,198	08-16-1994	Wu et al.	
	BU	5,340,309	08-23-1994	Robertson	
	BV	5,342,202	08-23-1994	Deshayes	
	BW	5,368,478	11-29-1994	Andreiko et al.	
	BX	5,382,164	01-17-1995	Stern	
	BY	5,395,238	03-07-1995	Andreiko et al.	
	BZ	5,431,562	11-11-1995	Andreiko et al.	
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	CC	5,452,219	09-19-1995	Dehoff et al.	
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	CI	5,542,842	08-06-1996	Andreiko et al.	
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	CK	5,587,912	12-24-1996	Andersson et al.	
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		Country Code ²	Number ⁴	Kind Code ⁵ (if known)				
	CT	EP	091,876	A1	10-19-1983	Duret		<input type="checkbox"/>
	CU	EP	299,490	A2	01-18-1989	Steinbichler et al.		
	CV	EP	376,873	A2	07-04-1990	Shafir		
	CW	EP	490,848	B1	06-17-1992	Andersson et al.		
	CX	EP	541,500	A1	06-12-1998	Andersson et al.		

Examiner Signature	<i>Cay E O'Connor</i>	Date Considered	3-9-05
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		Country Code ²	Number ⁴	Kind Code ⁵ (if known)				
	CY	EP	731,673	B1	09-18-1998	Andersson et al.		
	CZ	EP	774,933	B1	05-28-1997	Oden et al.		
	DA	FR	2,652,256	A1	03-29-1991	Jourda		<input type="checkbox"/>
	DB	FR	2,369,828	A1	06-02-1978	Suyehiro		<input type="checkbox"/>
	DC	WO	90/08,512	A1	08-09-1990	Lemcren		<input type="checkbox"/>
	DD	WO	91/04,713	A1	04-18-1991	Jourda et al.		<input type="checkbox"/>
	DE	WO	94/10,935	A1	05-26-1994	Andreiko et al.		<input type="checkbox"/>
	DF	WO	98/44,863	A1	10-15-1998	Andersson		<input type="checkbox"/>
CIX	DG	WO	98/58,596	A1	12-30-1998	Chishti et al.		<input type="checkbox"/>

Examiner Signature	<i>Casey E O'Connor</i>	Date Considered	3-9-05
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DH	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," JCO (July 1990), pp. 402-407.	
	DI	ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," <i>Optical Engineering</i> , Vol. 20(6) (1981), pp. 953-961.	
	DJ	ALTSCHULER et al., "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," <i>SPIE Imaging Applications for Automated Industrial Inspection and Assembly</i> , vol. 182 (1979), p. 187-191.	
	DK	ALTSCHULER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures," Program and Abstracts of Papers, Feb. 1975, <i>Journal of Dental Research</i> , Vol. 54, IADR Abstracts 1979, 2 pages total.	
	DL	ALTSCHULER, "3D Mapping of Maxillo-Facial Prosthesis," AADR Abstract #607, 1980, 2 pages total..	
	DM	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.	
	DN	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," <i>Acta Odontologica Scandinavica</i> , vol. 47 (1989), pp. 279-286.	
	DO	BAUMRIND et al., "A stereophotogrammetric system for the detection of prosthesis loosening in total hip arthroplasty, Applications of Human Biostereometrics (NATO)," <i>Proceedings of the Society of Photo-Optical Instrumentation Engineers</i> , Vol. 166, July 9-13, 1978, pp. 112-123.	
	DP	BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, <i>California Dental Association</i> , Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.	
	DQ	BAUMRIND et al., "Seminars in Orthodontics," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), p. 222.	
	DR	BAUMRIND, "A System for Craniofacial Mapping Through the Integration of Data from Stereo X-Ray Films and Stereo Photographs," An invited paper submitted to the 1975 American Society of Photogram. Symposium on Close-Range Photogram. Systems, University of Ill., Aug. 26-30, 1975, pp. 1-25.	
	DS	BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 223-232.	
	DT	BEGOLE et al., "A Computer System for the Analysis of Dental Casts," <i>The Angle Orthodontist</i> , Vol. 51 No. 3 (July 1981), pp. 253-259.	
	DU	BERNARD et al., "Computerized diagnosis in Orthodontics for Epidemiological Studies" (progress report), Abstracts of Papers, <i>Journal of Dental Research</i> , Vol. 71, Special Issue March 1-14, 1992, pp. 28-36.	
	DV	BHATIA et al., "A Computer-Aided Design for Orthognathic Surgery," <i>British Journal of Oral and Maxillofacial Surgery</i> , Vol. 22 (1984), pp. 237-253.	
	DW	BIGGERSTAFF et al., "Computerized analysis of occlusion in the postcanine dentition," <i>American Journal of Orthodontics</i> , Vol. 61, No. 3 (Mar. 1972), pp. 245-254.	

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	DX	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.	
	DY	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, 1 page total.	
	DZ	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter, Abstract of Papers, 1985, Dept. of Children's Dentistry and Orthodontics, <i>J Dent Res</i> , March 1986, pp. 428-431.	
	EA	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.	
	EB	BURSTONE et al., "Precision adjustment of the transpalatal lingual arch: Computer arch form predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.	
	EC	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.	
	ED	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.	
	EE	CHIAPPONE, "Constructing the gnathologic setup and positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.	
	EF	COTTINGHAM, "Gnathologic clear plastic positioner" <i>Am. J. Orthod.</i> , 55:23-31, 1969.	
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	EH	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.	
	EI	CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.	
CED	EJ	CURETON, "Correcting malaligned mandibular incisors with removable retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.	
	EK	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.	
	EL	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.	
	EM	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.	

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	EN	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.	
	EO	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 3 pages total.	
	EP	DenTrac Corporation, Dentrac document, pp. 4-13.	
	EQ	DURET et al, "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.	
	ER	DURET et al., "CAD/CAM imaging in dentistry," <i>Current Opinion in Dentistry</i> , Vol. 1 (1991), pp. 150-154.	
	ES	DURET, "The Dental CAD/CAM, General Description of the Project," <i>Hennson International Product Brochure</i> , Jan. 1986., 18 pages total.	
	ET	DURET, "Vers une prothese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.	
	EU	ECONOMIDES, "The Microcomputer in the Orthodontic Office," <i>JCO</i> , (Nov. 1979), pp. 767-772.	
	EV	ELSASSER, "Some observations on the history and uses of the Kesling positioner" <i>Am. J. Orthod.</i> , 36:368-374, 1950.	
	EW	FABER et al., "Computerized interactive orthodontic treatment planning," <i>Am. J. Orthod.</i> , Vol. 73, No. 1 (Jan. 1978), pp. 36-46.	
	EX	FELTON et al. "A computerized analysis of the shape and stability of mandibular arch form," <i>Am. Journal of Orthodontics and Dentofacial Orthopedics</i> , Vol. 92, No. 6 (Dec. 1987), pp. 478-483.	
	EY	FRIEDE et al., "Accuracy of Cephalometric Prediction in Orthognathic Surgery," <i>Abstract of Papers, Journal of Dental Research</i> , Vol. 70 (1987), pp. 754-760.	
	EZ	GIM-ALLDENT Deutschland, "Das DUX System: Die Technik" 4 pages total.	
	FA	GRAYSON, "New Methods for Three Dimensional Analysis of Craniofacial Deformity," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery, AAOMS Sept. 13, 1990, 3 pages total.	
	FB	GUESS et al., "Computer Treatment Estimates in Orthodontics and Orthognathic Surgery," <i>JCO</i> , (April, 1989), pp. 262-28.	
	FC	HEAVEN et al., "Computer-based Image Analysis of Artificial Root Surface Caries," "Automated Identification of Landmarks in Cephalometric Radiographs," <i>Abstracts of Papers, Journal of Dental Research</i> , Vol. 67, March 9-13, 1988, 2 pages total.	

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	FD	HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary in English, article in German), <i>Informationen</i> , (March 1991), pp. 375-396.		
	FE	HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," <i>AAOMS</i> 1999, p. 96.		
	FF	Inside the ADA, <i>Journal Of The American Dental Assoc.</i> , Vol. 118 (March 1989) 9 pages total.		
	FG	JCO Interviews, "Craig Andreiko, DDS, MS on the Eian and Orthos Systems", JCO, (Aug. 1994), pp. 459-468.		
	FH	JCO Interviews, "Dr. Homer W. Phillips on Computers in Orthodontic Practice, Part 2," JCO, (Dec. 1983), pp. 819-831.		
	FI	JERROLD, "The problem, electronic data transmission and the law," <i>AJO-DO</i> , (Apr. 1988), pp. 478-479.		
	FJ	JONES et al., "An Assessment of the Fit of a Parabolic Curve to Pre- and Post-Treatment Dental Arches," <i>British Journal of Orthodontics</i> , Vol. 16 (1989), pp. 85-93.		
	FK	KAMADA et al., "Case reports on tooth positioners using LTV vinyl silicone rubber" <i>J. Nihon University School of Dentistry</i> , 26(1):11-29, 1984.		
	FL	KAMADA et al., "Construction of tooth positioners with LTV vinyl silicone rubber and some case reports" <i>J. Nihon University School of Dentistry</i> , 24(1):1-27, 1982.		
	FM	KANAZAWA et al., "Three-Dimensional Measurements of the Occlusal Surfaces of Upper Molars in a Dutch Population," <i>J. Dent Res.</i> Vol. 63, No. 11 (Nov. 1984), pp. 1298-1301.		
	FN	KESLING, "Coordinating the predetermined pattern and tooth positioner with conventional treatment" <i>Am. J. Orthod. Oral Surg.</i> , 32/285-293, 1946.		
	FO	KESLING, "The philosophy of the tooth positioning appliance" <i>Am. J. Orthod. Oral Surg.</i> , 31(6):297-304, 1945.		
ceo	FP	KLEEMANN et al., "The speed positioner" <i>J. Clin. Orthod.</i> , 30:673-680, 1996.		
	FQ	KURODA et al., "Three-dimensional dental cast analyzing system using laser scanning" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 110:365-369, 1996.		
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	FS	LEINFELDER et al., "A new method for generating ceramic restorations: a CAD-CAM system," <i>Journal Of The American Dental Assoc.</i> , Vol. 118, No. 6 (Jun. 1989), pp. 703-707.		

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/632,482		
		Filing Date	August 1, 2003		
		First Named Inventor	PHAN, LOC X.		
		Art Unit	3732		
		Examiner Name	Unassigned		
Sheet	8	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	FT	MCNAMARA et al., <i>Orthodontic and Orthopedic Treatment in the Mixed Dentition</i> , Needham Press, January 1993. pp.347-353.	
	FU	MCNAMARA et al., "Invisible Retainers", <i>J. Clinical Orthodontics</i> , (August 1985) pp. 570-578.	
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	GH	REKOW, "Computer-Aided Design and Manufacturing in Dentistry: A Review of the State of the Art," <i>The Journal of Prosthetic Dentistry</i> , Vol. 58, No. 4 (Oct. 1987), pp. 512-516.	
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	GJ	REKOW, "Feasibility of an Automated System for Production of Dental Restorations," PhD Thesis, Univ. of Minnesota, Nov. 1988, 244 pages total.		
	GK	RICHMOND et al., Research Reports: "The development of a 3D Cast Analysis System," <i>British Journal of Orthodontics</i> , pp. 53-54.		
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	GQ	SHILLIDAY, "Minimizing finishing problems with the mini-positioner" <i>Am. J. Orthod.</i> 59:596-599, 1971		
	GR	Siemens, "CEREC - Computer-Reconstruction," <i>High Tech in der Zahnmedizin</i> , 14 page total.		
	GS	Sirona Dental Systems GmbH, CEREC 3D, Manuel utilisateur, Version 2.0X (in French), 2003, 114 pages total.		
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	GU	U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 21 pages total.		
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	GX	VAN DER LINDEN et al., "Three-Dimensional Analysis of Dental Casts by Means of the Optocom," <i>J Dent Res</i> , July-August 1972, p. 1101.		
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	HC	WARUNEK et al., "Physical and mechanical properties of elastomers in orthodontic positioners" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 95:388-400, 1989.	
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	HE	WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution," <i>Journal of Dental Practice Admin.</i> , Jan./March 1987, pp. 2-5.	
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	HH	YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," <i>Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society</i> , Vol. 12, No. 5, pp. 2051-2053, 1990.	
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U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CEO	AA	3,922,786			Lavin	12/1975
CEO	AB	5,011,465 5,044,706			Lemchen	4/1991
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CEO	AG	6,309,215			Phan et al.	10/2001

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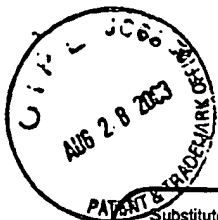
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CEO	AI	Chippone, "Constructing the gnathologic setup and positioner" <i>Journal of Clinical Orthodontics</i> (1980) 14:121-133.	
CEO	AJ	Cottingham, "Gnathologic clear plastic positioner" <i>American Journal of Orthodontics</i> (1969) 55:23-31.	
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CEO	AL	Kesling et al., "The philosophy of the tooth positioning appliance" <i>American Journal of Orthodontics and Oral Surgery</i> (1945) 31:297-304.	

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		Country Code ³	Number ⁴ Kind Code ⁵ (if known)			
CEL	AM				Kesling et al., "Coordinating the predetermined pattern and tooth positioner with conventional treatment" <i>American Journal of Orthodontics and Oral Surgery</i> (1945) 32:285-293.	
CEL	AN				Kleeman et al., "The speed positioner" <i>Journal of Clinical Orthodontics</i> (1996) 30:673-680.	
CEL	AO				Product Brochure, Raintree Essix™, Inc. New Orleans, Louisiana 70125, 7 pages total from http://www/essix.com/magazine/default.html .	
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CEL	AQ				Shilliday, "Minimizing finishing problems with the mini-positioner" <i>American Journal of Orthodontics</i> (1971) 59:598-599.	
CEL	AR				Warunek et al., "Clinical use of silicone elastomer appliances" <i>Journal of Clinical Orthodontics</i> (1989) 23:694-700.	
CEL	AS				Wells, "Application of the positioner appliance in orthodontic treatment" <i>American Journal of Orthodontics</i> (1969) 55:23-31.	

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